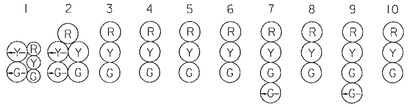
## PHASE CHART




| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| PHASE 2+5 | G/C | G/C | G | R | R | R | R | R | R | R |
| 2+5 CHANGE | G/Y | G/Y | G | R | R | R | R | R | R | R |
| PHASE 2+6 | G | G | G | G | G | R | R | R | R | R |
| 2+6 CHANGE | Y | Y | Y | Y | Y | R | R | R | R | R |
| PHASE 3 | R | R | R | R | R | G | G/C | G | R | R |
| 3 CHANGE | R | R | R | R | R | Y | Y | G | R | R |
| PHASE 4 | R | R | R | R | R | R | R | R | G/C | G |
| 4 CHANGE | R | R | R | R | R | R | R | R | Y | Y |
| FLASHING OPERATION | FL/Y | FL/Y | FL/Y | FL/Y | FL/Y | FL/R | FL/R | FL/R | FL/R | FL/R |

## PROJECT CONTACTS

ACT PERSONS FOR DISTRICT #3 ARE AS FOLLOWS:

IE WATKINS
ENGINEER
01) 513-7311

SHAKIB
T DISTRICT ENGINEER - TRAFFIC
01) 513-7358

ECKLE
NGINEER
01) 513-7350

RD L. DAFF, SR.
AFFIC OPERATIONS DIVISION
0) 787-7630

R COMPANY REPRESENTATIVE IS:
E GAS AND ELECTRIC COMPANY
H G. BUNCH
OR
L/COMMERCIAL SERVICES
NESS CONSTRUCTION
0) 859-9030

## PROJECT DESCRIPTION

OJECT INVOLVES THE MODIFICATION OF THE TRAFFIC SIGNAL AT MD 197
W PARKWAY NORTHBOUND RAMP (RAMP C-1) IN PRINCE GEORGE'S COUNTY.
IS ASSUMED TO RUN IN A NORTH SOUTH DIRECTION.

CTION OPERATION

AL OPERATION

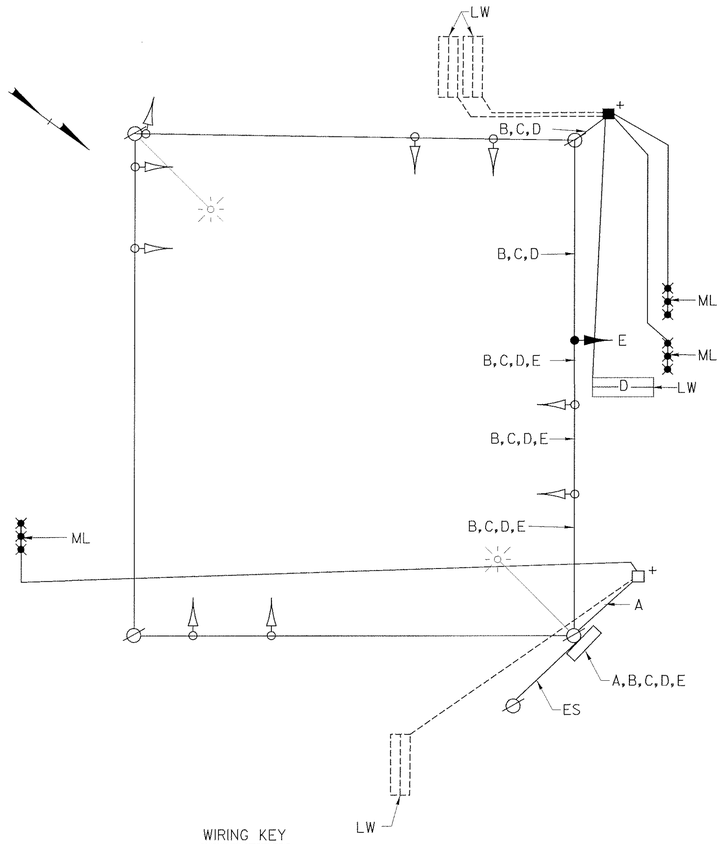
TRAFFIC CONTROL STAGE 5 THE INTERSECTION WILL OPERATE IN A NEMA
PHASE FULL-TRAFFIC-ACTUATED MODE WITH SOUTHBOUND AND NORTHBOUND
ND 197 APPROACHES OPERATING CONCURRENTLY. THE RAMP FROM B/W PARKWAY
OWDON ROAD APPROACHES WILL OPERATE AS SPLIT PHASES. EXCLUSIVE LEFT
HASING WILL BE PROVIDED FOR MD 197 SOUTHBOUND.

## MAINTENANCE OF TRAFFIC

FFIC CONTROL NUMBERS SHALL BE REFERENCED
PROJECT

RD NO. MD-105.00
RD NO. MD-105.01
RD NO. MD-105.02
RD NO. MD-105.101 (FLAGGING OPERATION)
RD NO. MD-105.103 (INTERSECTION FLAGGING OPERATION)
RD NO. MD-105.105 (SHOULDER WORK)
RD NO. MD-105.107 (LANE SHIFT)
RD NO. MD-105.109 (LANE SHIFT)
TANDARDS TO BE MODIFIED BY REPLACING
GN WITH A W29-1 SIGN (ROAD WORK AHEAD).

## WIRING DIAGRAM




### WIRING KEY

A,B,C } MICRO LOOP PROBE SET

D } 2- CONDUCTOR ELECTRICAL CABLE (ALUMINUM SHIELDED)

E } 7- CONDUCTOR ELECTRICAL CABLE (NO.14 A.W.G.)

LW - LOOP WIRE (NO.14 A.W.G.)

ES - EXISTING SERVICE

\+ - ¾ IN. x 10 FT. GROUND ROD

ML - MICRO LOOP PROBE SET

## EQUIPMENT LIST "A"

A. EQUIPMENT TO BE FURNISHED BY THE SHA.

| SPEC. SECTION | CATEGORY CODE NO. | QUANTITY | DESCRIPTION |
|---|---|---|---|
| 806 | 900000 | 1 EACH | 12 IN./8 IN., 1-WAY, 5-SECTION 12 IN. (YA.GA.) AND 8 IN. (R.Y.G.) SIGNAL HEAD SPAN MOUNT |

## EQUIPMENT LIST "B"

B. EQUIPMENT TO BE FURNISHED AND/OR INSTALLED BY THE CONTRACTOR

| SPEC. SECTION | CATEGORY CODE NO. | QUANTITY | DESCRIPTION |
|---|---|---|---|
| 104 | 120500 | L.S. | MAINTENANCE OF TRAFFIC |
| ——— | 860265 | 4 EACH | RELOCATE EXISTING SIGNAL HEAD |
| ——— | 800000 | 14 SF | RELOCATE EXISTING SIGN ON SPAN WIRE OR MAST ARM |
| ——— | 114245 | 65 L.F. | FURNISH AND INSTALL 24 IN. WHITE REMOVABLE PREFORMED PAVEMENT MARKING TAPE (STOP LINE) |
| ——— | 100000 | 25 L.F. | FURNISH AND INSTALL 5" WHITE REMOVABLE PREFORMED PAVEMENT MARKING TAPE |
| 805 | 805160 | 5 L.F. | FURNISH AND INSTALL 1" LIQUID TIGHT FLEXIBLE NON-METALLIC CONDUIT FOR DETECTOR SLEEVE |
| 810 | 800000 | 1 EACH | FURNISH AND INSTALL MICRO-LOOP PROBE SET WITH 500' LEAD-IN |
| 810 | 800000 | 2 EACH | FURNISH AND INSTALL MICRO-LOOP PROBE SET WITH 1000' LEAD-IN |
| 805 | 805011 | 56 L.F. | FURNISH AND INSTALL 1 IN. GALVANIZED ELECTRICAL CONDUIT FOR DETECTOR SLEEVE |
| 815 | 862102 | 1227 L.F. | FURNISH AND INSTALL SAW CUT FOR SIGNAL (LOOP DETECTOR) |
| ——— | 800000 | L.S. | REMOVE AND DISPOSE OF EXISTING MATERIAL AND EQUIPMENT |
| ——— | 800000 | 1 EACH | UNCOVER OVERHEAD SIGN |
| ——— | 800000 | 1 EACH | UNCOVER SIGNAL HEAD |
| 810 | 861104 | 190 L.F. | FURNISH AND INSTALL ELECTRICAL CABLE 2 CONDUCTOR (ALUMINUM SHIELDED) |
| 810 | 862101 | 500 L.F. | FURNISH AND INSTALL LOOP WIRE ENCASED IN FLEXIBLE TUBING ((NO.14 AWG) |
| 814 | 800000 | 1 EACH | INSTALL SIGNAL HEADS - ANY TYPE |

## CONSTRUCTION DETAILS

STAGE 5

A. RELOCATE SIGNAL HEADS AND SIGNS AS DIRECTED BY THE ENGINEER.

B. INSTALL 24 IN. WHITE REMOVABLE PREFORMED PAVEMENT MARKING TAPE (STOPLINE) INSTALLED BY OTHERS.

C. REMOVE STOP LINE.

D. UNCOVER SIGNAL HEAD.

E. INSTALL 5" WHITE REMOVABLE PREFORMED PAVEMENT MARKING TAPE.

F. FURNISH AND INSTALL 1" LIQUID TIGHT FLEXIBLE NON-METALLIC CONDUIT FOR DETECTOR SLEEVE.

G. FURNISH AND INSTALL 1" GALVANIZED ELECTRICAL CONDUIT FOR DETECTOR SLEEVE.

H. INSTALL MICRO-LOOP PROBE SET WITH 500' LEAD-IN.

I. ABANDON MICRO-LOOP PROBE SET.

J. NOT USED.

K. INSTALL MICRO-LOOP PROBE SET WITH 1,000' LEAD-IN.

L. UNCOVER OVERHEAD SIGN.

M. INSTALL 6' x 30' LOOP DETECTOR (3-6-3 TURNS) ENCASED IN 1¼" FLEXIBLE TUBING, QUADRUPOLE TYPE.

N. INSTALL SIGNAL HEAD - SPAN MOUNT

STAGE 5
TEMPORARY TRAFFIC SIGNALS

ADDENDUM

SS-23

RUMMEL, KLEPPER & KAHL, LLP
CONSULTING ENGINEERS
81 MOSHER STREET
BALTIMORE, MARYLAND 21217
TEL: (410) 728-2900 FAX: (410) 383-3270

REVISIONS:
(B) February, 1999 Reconstruct Due To New Geometrics. SHA No.: N/A

APPROVALS:
CHIEF SIGNAL DESIGN SECTION
ASST. DISTRICT ENGINEER TRAFFIC
CHIEF TRAFFIC ENGINEERING DESIGN DIVISION
DIRECTOR OFFICE OF TRAFFIC & SAFETY
ORIGINAL ON FILE

MDOT - STATE HIGHWAY ADMINISTRATION
*Office of Traffic & Safety*
TRAFFIC ENGINEERING DESIGN DIVISION LOG MILE # 1601971.69

DRAWN BY: SMH
DES. BY: SMH/DLA
CHK. BY: BJH

MD 197 AT SNOWDEN RD/RAMP C-1
SIGNAL PLAN
COUNTY: PRINCE GEORGE'S

DATE: FEBRUARY, 1999 F.A.P. NO. SEE TITLE SHEET
SCALE: N/A S.H.A. NO. N/A

TS/STD. NO.: 3582B-X5-GI1
SHEET NO. 126M OF 367

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